

IN THE CLAIMS:

Claims 1, 4, 7, 9-18, 21, 24, and 26-34 were previously cancelled. Claims 2, 3, 5, 6, 8, 19, 22, 23, and 25 have been amended herein. All of the pending claims are presented below. This listing of claims will replace all prior versions and listings of claims in the application. Please enter these claims as amended.

1. (Cancelled)
2. (Currently amended) The assembly system of claim 5, wherein the plurality of conductive spheres drop into and pass downwardly through the plurality of through-holes by gravitational force.
3. (Currently amended) The assembly system of claim 5, wherein the pattern of the plurality of through-holes corresponds to a pattern of bond pads on the substrate.
4. (Cancelled)
5. (Currently amended) An assembly system for placing a plurality of conductive spheres on a substrate having an upper surface having conductive sites comprising one of recessed sites and level sites with respect to the upper surface, the assembly system comprising: a stencil plate with upper and lower surfaces, and a pattern of a plurality of through-holes, the ~~diameter of said~~ each through-hole of the plurality of through-holes of the pattern ~~are~~ is greater than the diameter of ~~the~~ each conductive sphere of the plurality of conductive spheres by up to 1 mm, the stencil plate configured to place the plurality of conductive spheres in the pattern of the plurality of through-holes on a surface of the substrate; a hopper having side walls formed at a continuous uninterrupted angle extending from an upper opening at the top of the hopper having a first dimension for feeding the plurality of conductive spheres into a smaller bottom opening having a second dimension smaller than the first dimension of the upper opening extending across ~~the~~ a first pattern for

dispensing the plurality of conductive spheres into ~~said~~ the plurality of through-holes extending across the stencil plate, the smaller bottom opening having a width in ~~the~~ a range of at least two diameters of a conductive sphere to about ten diameters of a conductive sphere, the hopper having a bottom lower surface spaced from an upper surface of the stencil plate a distance in the range of about less than one-third the diameter of a conductive sphere; and

a positioning apparatus for moving the hopper over the pattern of the plurality of through-holes relative the stencil plate to place the plurality of conductive spheres into the plurality of through-holes onto one of the recessed sites and level sites of the upper surface of ~~said~~ the substrate.

6. (Currently amended) The assembly system of claim 5, wherein the stencil plate is spaced from the substrate to restrain the plurality of conductive spheres dropped onto the substrate within the plurality of through-holes of the pattern.

7. (Cancelled)

8. (Currently amended) The assembly system of claim 5, wherein the stencil plate is spaced from the substrate to restrain the plurality of conductive spheres dropped onto depressed bond pads of the substrate.

9.-18. (Cancelled)

19. (Currently amended) The assembly system of claim 22, wherein the plurality of conductive spheres drop into and pass downwardly through the plurality of through-holes by gravitational force.

20. (Previously presented) The assembly system of claim 22, wherein the first pattern corresponds to a pattern of bond pads on the substrate.

21. (Cancelled)

22. (Currently amended) An assembly system for positioning a plurality of conductive spheres on a substrate having an upper surface having conductive sites comprising one of recessed sites and level sites with respect to the upper surface, each conductive sphere of the plurality of conductive spheres having a diameter, the assembly system comprising:

a stencil plate having an upper surface, having a lower surface, having a pattern of a plurality of through-holes, each through-hole of the plurality having a diameter, the diameters of the through-holes of the plurality of the first pattern are greater than the diameters of the plurality of conductive spheres by up to ~~1mm~~, said 1 mm, the stencil plate configured to position the plurality of conductive spheres in the pattern of the through-holes of the plurality on a ~~proximate~~ surface of the substrate proximate thereto;

a hopper having a top opening having a first dimension narrowing through a continuous constant angle from the top opening to a bottom opening with a second dimension extending across the first pattern for dispensing the plurality of conductive spheres into the plurality of through-holes of the pattern of the stencil plate, the bottom opening ~~having~~ having a width in the range of at least two diameters of a conductive sphere to about ten diameters of a conductive sphere, the hopper having a bottom lower surface spaced from an upper surface of the stencil plate a distance in the range of about less than one-half the diameter of a conductive sphere to about less than one-third the diameter of a conductive sphere; and

a positioning apparatus for moving the hopper over ~~said~~ the plurality of through-holes of the pattern ~~relative of~~ to the stencil plate to position the plurality of conductive spheres into the plurality of through-holes onto one of the recessed sites and level sites of the ~~proximate upper~~ surface of the substrate proximate thereto.

23. (Currently amended) The assembly system of claim 22, wherein the stencil plate is spaced from the substrate to restrain the plurality of conductive spheres dropped onto the substrate within ~~said~~ the first pattern.

24. (Cancelled)

25. (Currently amended) The assembly system of claim 20, wherein the stencil plate is spaced from the substrate to restrain the plurality of conductive spheres dropped onto depressed bond pads of the substrate.

26.-34. (Cancelled)